

1: IDENTIFICATION

Chemical Name	Sodium Acifluorfen : sodium 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate Clodinafop Propargyl : prop-2-ynyl (2R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoate		
Synonyms	Sodium Acifluorfen 16.5 % + Clodinafop propargyl 8 % EC	Trade Name	HOTSURE®
Uses	Herbicides	Molecular Formula	$C_{17}H_{13}ClFNO_4 + C_{14}H_6ClF_3NO_5.Na$
Manufacturer/ Supplier	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
Emergency Contact	9503095030	E-mail	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Acifluorfen sodium	62476-59-9	16.50%
Clodinafop propargyl	105512-06-9	8.00%

3: HAZARD IDENTIFICATION

Physical/ Chemical Hazard:	Flammable liquid Category 3
Human Health Hazard:	Acute Toxicity - Oral Category 5; Skin Corrosion/Damage Category 3; Eye damage/Irritation Category 1; Sensitization - Skin Category 1; STOT - Single Exposure Category 3
Environment Hazard:	Aquatic Acute Toxicity Category 1 Aquatic Chronic Toxicity Category 1

4: FIRST AID MEASURES

General: Have the product container, label or safety data sheet while seeking medical attention, a poison control center or physician, or going for treatment.

Inhalation: Move patients to fresh air. Keep the patients warm and at rest. If person is not breathing then give artificial respiration. Allow patients to rest. Immediately seek medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting unless told by a physician. Do not give anything by mouth to an unconscious person. Seek medical attention immediately and show this container or label.

Skin Contact: In case of contact with product, wash immediately skin area with plenty of water and soap. Speed in removing material from skin is extremely important. Remove and isolate contaminated clothing and shoes. Call medical attention.

Eye Contact: Rinse immediately with plenty of water for several minutes. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

Note to physician: No specific antidote. Treat symptomatically and give supportive therapy.

5: FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide

Unsuitable Extinguishing Media: High pressure water jet

Specific Hazards : The product may release harmful and toxic fumes on combustion.

Hazardous Thermal (de)composition: Harmful and toxic vapours/gases including oxides of nitrogen and carbon, hydrogen chloride and sulfur compounds may release as combustion products

Special Procedures: Move containers away from area if it can be done without risk. If possible remove containers from fire zone, cool them with water spray. Minimize use of water to prevent environmental contamination. Dike and collect water used to fight fire to prevent environmental damage due to runoff. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard. Do not discharge extinguishing water into the drain or water bodies.

Protection of fire fighters: Do not enter fire areas without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ventilate spillage area. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from spill/ fumes.

Environmental Precaution: Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.

Methods for Cleaning up: Clean up any spills as soon as possible, using an inert absorbent material such sand, silica gel, acid binder, universal binder, sawdust. Collect and transfer into containers for disposal. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations. If significant amount of product enters into drain, notify the local authorities.

7: HANDLING & STORAGE

Handling: Do not smoke, drink, or eat during handling. Wash hands using liquid detergent. Wear protective clothing to avoid contact and/or inhalation with the product. Eliminate all sources of ignition from areas where the material is handled or used. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Good personal hygiene procedures must be practiced.

Specific Conditions: Good local exhaust ventilation. Full face protective mask.

Storage: Store in dry, cool, well-ventilated area, away from direct sunlight. Keep away from incompatible material. Keep in original container and tightly closed when not in use. Keep out of reach of children

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure area is well-ventilated, especially confined area to maintain airborne levels below recommended exposure limits. Ensure lighting and electrical equipment are not a source of ignition. Handle in accordance with good industrial hygiene and safety practice.

General Protection: Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Personal Protection : Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

Respiratory Protection: Use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter.

Skin Protection: Must wear suitable protective clothing including long-sleeve shirt, long pants, shoes plus socks. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

Hand Protection: Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

Eye Protection: Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance : Homogenous colored liquid

Flash Point [°C] : 41

Physical State: Liquid

Colour : Pale yellow to brown

Solubility in water : Emulsifiable

Odour: No data available

10: STABILITY & REACTIVITY

Stability: Stable for under normal circumstances.

Hazardous reaction : None under normal circumstances

Hazardous decomposition products : Harmful and toxic vapours/gasses including oxides of nitrogen and carbon, hydrogen chloride and sulfur compounds may release as thermal decomposition products.

Conditions to avoid : Heat, spark or ignition source.

Material to avoid : Strong oxidizing agents.

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : 2500

Rat inhalation LC50 [mg/l/4h] : >1.14

Skin irritation (rabbit): Mild Irritant

Dermal (rat) LD50 [mg/kg] : 5000

Skin Sensitization (Guinea Pig): Sensitizer

Eye irritation (rabbit): Irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Fish LC50 (96 hrs)[mg/L]: 16

Acifluorfen-Sodium: Daphnia magna EC50 [mg/L]: 77; Algae EC50[mg/L]: 260

Clodinafop-propargyl : Daphnia magna EC50 [mg/L]: 0.23; Algae EC50[mg/L]: >1.6

Bio-accumulation : No data available

Persistence, Degradability and Mobility in soil: No data available

13: DISPOSAL CONSIDERATION

Waste-disposal Procedures: Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container.

Contaminated Packaging: Empty remaining contents and the rinse containers thrice before disposal. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers unless they are specifically designed to be refilled.

14: TRANSPORT INFORMATION

UN No. 1993

Proper Shipping Name : Flammable liquid, n.o.s. (Acifluorfen-Sodium, Clodinafop-propargyl, Aromatic solvent)

Land Transport (ADR/RID) : Class-9, Packing Group-III

Sea Transport (IMO) (IMDG) : Class-9, Packing group-III, Marine Pollutant- Yes

Air Transport (IATA / ICAO) : Class-9, Packing group-III, Marine Pollutant- Yes

15: REGULATORY INFORMATION

Hazard Symbol : GHS02, GHS05, GHS07 GHS09

H - Statement : H226, H303, H316, H317, H318, H335, H410

16: OTHER INFORMATION

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